

Package ‘shinyKnobs’

October 14, 2022

Title A Collection of Knob Inputs for 'shiny'

Version 0.1.3

Description A collection of highly configurable, touch-enabled knob input controls for 'shiny'. These components can be styled to fit in perfectly in any app, and allow users to set precise values through many input modalities. Users can touch-and-drag, click-and-drag, scroll their mouse wheel, double click, or use keyboard input.

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Encoding UTF-8

LazyData true

RoxygenNote 7.0.1

Imports shiny, htmltools

URL <https://github.com/cotepat/shinyKnobs>

BugReports <https://github.com/cotepat/shinyKnobs/issues>

NeedsCompilation no

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Repository CRAN

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touchGripKnobInput *Highly configurable, touch-enabled grip dial knob input for Shiny*

Description

Highly configurable, touch-enabled grip dial knob input for Shiny

Usage

```
touchGripKnobInput(
  inputId,
  label = NULL,
  labelPosition = "top",
  width = "auto",
  step = "any",
  min = 0,
  max = 1,
  initial = 0.5,
  color = "orange",
  guideTicks = 9,
  gripBumps = 5,
  gripExtrusion = 0.5,
  minRotation = 20,
  maxRotation = 340,
  dragResistance = 100,
  wheelResistance = 100,
  globalRatePolicy = NULL,
  globalRatePolicyDelay = 500
)
```

Arguments

inputId	The input slot that will be used to access the value.
label	Optional label for knob
labelPosition	Position of label ('top' or 'bottom')
width	Width of the knob as a percentage of the container element
step	The step amount for value changes, usually used with min and max parameters. Can be 'any' (no step)
min	The minimum input value.
max	The maximum input value.
initial	Initial value of the knob. Knob resets to this value when double-clicked.
color	The color to use for the focus indicator and indicator dot. You can set any *hex* color (ex : '#0F1BC3') or named color, choices are 'purple', 'blue', 'green', 'yellow', 'red', 'orange' or 'transparent' to disable.

guideTicks	Number of tick marks on the outer guide ring (default = 9)
gripBumps	Number of grip bumps that appear when interacting with the dial (default = 5)
gripExtrusion	The degree to which the grips 'cut' into the dial when the user interacts with it. (range 0 to 1, default = 0.5)
minRotation	The angle (in degrees) of rotation corresponding to the min value, relative to pointing straight down (0 degree) (default = pointing to the first guide tick mark)
maxRotation	The angle (in degrees) of rotation corresponding to the max value, relative to pointing straight down (0 degree) (default = pointing to the last guide tick mark)
dragResistance	The amount of resistance to value change on mouse/touch drag events. Higher value means more precision, and the user will have to drag farther to change the input's value. (0 to 100)
wheelResistance	The amount of resistance to value change on mouse wheel scroll. Higher value means more precision, and the mouse wheel will be less effective at changing the input's value. (0 to 100)
globalRatePolicy	Rate policy determining the behavior of output value events. NULL will output values in real-time, 'debounce' will output values once the knob stops moving, 'throttle' will output values while the knob is moving but only at a certain frequency (controlled with ratePolicyDelay). This setting will affect every touchKnobInput in the project.
globalRatePolicyDelay	Delay to use when globalRatePolicy is set to 'throttle' or 'debounce'. This setting will affect every touchKnobInput in the project.

Value

Numeric value server-side.

Examples

```
if (interactive()) {

  library("shiny")
  library("shinyKnobs")

  ui <- fluidPage(
    touchGripKnobInput(
      inputId = "myKnob",
      width = "25%",
      label = "A label...",
      color = "#428BCA"
    ),
    verbatimTextOutput(outputId = "res")
  )

  server <- function(input, output, session) {
```

```

    output$res <- renderPrint(input$myKnob)
  }

  shinyApp(ui = ui, server = server)
}

```

 touchKnobInput

Highly configurable, touch-enabled knob input for Shiny

Description

Highly configurable, touch-enabled knob input for Shiny

Usage

```

touchKnobInput(
  inputId,
  label = NULL,
  labelPosition = "top",
  width = "auto",
  step = "any",
  min = 0,
  max = 1,
  initial = 0.5,
  color = "orange",
  indicatorDot = TRUE,
  indicatorRingType = "positive",
  dragResistance = 100,
  wheelResistance = 100,
  globalRatePolicy = NULL,
  globalRatePolicyDelay = 500
)

```

Arguments

inputId	The input slot that will be used to access the value.
label	Optional label for knob
labelPosition	Position of label ('top' or 'bottom')
width	Width of the knob as a percentage of the container element
step	The step amount for value changes, usually used with min and max parameters. Can be 'any' (no step)
min	The minimum input value.
max	The maximum input value.
initial	Initial value of the knob. Knob resets to this value when double-clicked.

color	The color to use for the indicator ring fill, focus indicator, and indicator dot (if present). You can set any <i>*hex*</i> color (ex : '#0F1BC3') or named color, choices are 'purple', 'blue', 'green', 'yellow', 'red', 'orange' or 'transparent' to disable
indicatorDot	Whether the knob should display an indicator dot for making it easier to read the current value. (TRUE or FALSE)
indicatorRingType	The fill style for the indicator ring. 'positive' - color fills in from the left as value increases. 'negative' - color fills in from the right as value decreases. 'split' - color fills left/right from middle as value increases/decreases relative to the middle value (half-way between min and max) Type of knob can be 'positive' (clockwise), 'negative' (counter-clockwise) or 'split' (plus/minus vs center position)
dragResistance	The amount of resistance to value change on mouse/touch drag events. Higher value means more precision, and the user will have to drag farther to change the input's value. (0 to 100)
wheelResistance	The amount of resistance to value change on mouse wheel scroll. Higher value means more precision, and the mouse wheel will be less effective at changing the input's value. (0 to 100)
globalRatePolicy	Rate policy determining the behavior of output value events. NULL will output values in real-time, 'debounce' will output values once the knob stops moving, 'throttle' will output values while the knob is moving but only at a certain frequency (controlled with ratePolicyDelay). This setting will affect every touchKnobInput in the project.
globalRatePolicyDelay	Delay to use when globalRatePolicy is set to 'throttle' or 'debounce'. This setting will affect every touchKnobInput in the project.

Value

Numeric value server-side.

Examples

```
if (interactive()) {

  library("shiny")
  library("shinyKnobs")

  ui <- fluidPage(
    touchKnobInput(
      inputId = "myKnob",
      label = "A label...",
      initial = 0,
      width = "25%",
      min = -50,
      max = 50,
      color = "#428BCA"
```

```
    ),  
    verbatimTextOutput(outputId = "res")  
  )  
  
  server <- function(input, output, session) {  
    output$res <- renderPrint(input$myKnob)  
  }  
  
  shinyApp(ui = ui, server = server)  
}
```

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